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ORIGINAL DEPARTMENT.

LECTURE.

SOME MEDICAL PILGRIMAGES ABROAD.

AN INTRODUCTORY LECTURE TO THE SUMMER COURSE OF JEFFERSON MEDICAL COLLEGE, DELIVERED MARCH 30th, 1874.

BY DR. RALPH M. TOWNSEND.

(Concluded.)

We now leave the great metropolis still further behind, and run fifty miles away, through the fields and woods of Essex, to the green and quiet churchyard of the little parish of Hempstead. Here rests the discoverer of the circulation of the blood. We should rather fancy his monument jutting forth in some busy city, at the intersection of great arteries of travel. It hardly needs the chiseler's art on the modest monument that crowns his grave to tell us of his fame:—

"The circling streams, once thought but pools of blood,

(Whether life's fuel or the body's food)
From dark oblivion Harvey's name shall save."

Pettigrew writes (1849) that Harvey's coffin can still be seen in the vault; and that it is entirely of lead, mummy-like in shape, and has inscribed on the breast, in great letters:—

"DR. WILLIAM HARVEY,
June 3d, 1657."

Prior to Harvey's time, probably no one branch of the tree of knowledge had ever been so vigorously shaken as this of the circulation. Realdo Colombo, the successor of Vesalius, and Michael Servetus, a Spanish anatomist and theologian, whose life was offered up at the stern

altar of Calvinism, both nearly succeeded in extracting this precious kernel of discovery; but they passed away with the burr only half opened, and left the pouting fruit to drop into Harvey's eager hands. Even then he had to battle a quarter of a century before science would open her cautious ranks and let the new discovery in.

The Cathedral of St. Peter, in Gloucester, was originally one of the finest Benedictine abbeys in the British Kingdom. It is remarkable for combining, in itself, the architecture of successive ages, the Norman and Saxon, with some of the finest examples of the different styles of Gothic. But what will make it more attractive to us than all these, is that its nave contains a well cut statue of Jenner, and the grandeur of its interior is softly illumined with colored light falling upon it through a rich memorial window to the same illustrious man. A little way from Gloucester, in the church of the market town of Berkeley, Jenner and his wife, side by side, sleep their long sleep. The tower of the church, which is disjointed from the rest of the building and adjoins the yard of Jenner's former residence, is covered with a rich, green livery of vigorous ivy. Jenner plucked the root from which it sprung from the tomb of Strongbow, at Tintern Abbey.* His fame, like the little scion he planted, now encircles the church's goodly tower.

Jenner, though known chiefly to us by his great discovery, was a hard and industrious worker in the field of natural history. He assisted his preceptor, John Hunter, in many experiments illustrative of the structure and functions of animals. He was also an accurate

* Baron's Life of Jenner.

anatomist and pathologist, and made advanced investigations into the diseases of the lymphatic system. But it was the discovery of vaccination that will forever place Jenner in the front rank of human benefactors. He, to-day, who would bring forth a remedy that would successfully combat the wastes of phthisis, or the ravages of carcinoma, would do more for his race than did Jenner.

Prior to the discovery of vaccination, of all born, one in fourteen died of the small-pox; and inoculation, by spreading the disease, increased this ratio. In the Russian empire small-pox destroyed two millions inhabitants in a single year; and in Thibet, on one occasion, the same dire pestilence made deserted the capital for three years. These data deal simply with the immediate deaths, and say nothing of the results from dread sequelæ.

When we think, therefore, of what Jenner's discovery hath wrought, we cannot but look back to him with that reverence which devout Christians should feel for the labors of the Evangelists.

Newton, grasping and unwinding like a skein the intangible light, and deducing his law of gravitation from the apple's fall; Watt, so handling steam as to make it draw a gossamer thread or rend an oak; Franklin, bringing down the lightning; and Morse, sending it around the earth like a racer; these works, all Godlike, are entwined with the traditions of our youth, but they are entitled to no higher place in the remembrance of mankind than the labors of Jenner among the kine.

Briefly will I give you the history of this great discovery. Jenner, while a student of medicine, heard a country girl say to his rural preceptor, "I cannot take the small-pox, for I have had the cow-pox." To unravel the meaning of that assertion became the labor of Jenner's life. There was no book to enlighten him upon the subject, for the words dropped by the country maid, like some old tale of chivalry, were culled from an unwritten page. But, having kindled the spark of discovery, he did not let it die for want of vigorous fanning. Whether studying in London, riding along the Gloucester lanes, or corresponding with his friends, the subject always remained uppermost in Jenner's mind. He seemed to feel that it was his, in God's good providence, to stand between the living and the dead, and that, through him, one of the gates of death might be closed and a plague be stayed.

For over thirty years he labored in finding out, and experimenting upon, the eruptions of many inferior domestic animals, but especially the cow. The latter, he found, was subjected to a variety of spontaneous eruptions on the teats, all of which were capable of communicating sores to the hands of the milkers; and that, whatever sore was thus produced, was called, in the dairy, cow-pox. By analyzing and reducing these eruptions in the cow, he found out, not only the difference between true and spurious cow-pox, but the precise stage at which the true cow-pox pustule afforded its protecting power. Between May and June, 1796, he took matter from the hand of a milk-maid, who had been infected by her master's cows, and inserted it into the arm of a healthy boy. After the vaccination had run its course, small-pox matter, taken from a pustule, was carefully inserted, by several incisions, into the arm of the same boy. No disease followed; and the careful and successful repetitions of the experiment rendered the great discovery complete. All Jenner's trials and troubles were now fairly over. His waters of Marah were henceforth to lose their bitterness, and spring, pure and sparkling, from the rock. He published his immortal discovery in 1798, and dedicated it to a brother member of his profession.

It may interest you to know that the first vaccinations in this country were performed by Dr. Waterhouse, of Boston, upon his own children, in 1799, and that three Presidents of the United States were afterwards associated with him in his labors, viz, John Adams, Thomas Jefferson, and John Quincy Adams.

Nowhere in our pilgrimage should we turn more willing feet than towards that beautiful capital—no less a medical Mecca than a modern Athens—the city of Edinburgh. Around it the history of medicine will ever be closely entwined. Its University was founded in 1582, during the reign of James vi. It was preceded by those of St. Andrew's, 1412; Glasgow, 1454; and King's College, Aberdeen, 1494. As a school of medicine, the University of Edinburgh first rose in repute during the time of the first Monro, about 1720 to 1760.

The present University building was erected in 1789. To stand by the noble Doric columns of its portico, and look into its well-worn court, is as if we stood before one vast monument to the large and brilliant group of Scotch workers in the field of medicine; for nearly all of them,

either as students or teachers, had been connected with this old college. Foremost among them was Sir Andrew Balfour, a student of Harvey, who introduced the dissection of the human body into Scotland, projected the first hospital in Edinburgh, and founded its Botanic Garden and College of Physicians. Of the latter, he was first president. He died in 1694.

James Douglas, the preceptor of William Hunter, was the first, in 1730, to accurately and correctly describe the peritoneum. John Douglas, a celebrated lithotomist, wrote a work on stone, and a treatise on "The Utility of Bark in Mortification."

We might insert here a translation of a curious old epitaph taken from the Houf, or common burial place of Dundee. It bears date of 1662:—

"Here lies good Andrew Archbald, to his art
Chirurgeon; to the poor he did impart
His helpful hand; still minding God, who bids
The Christian throw his bread upon the floods.
He in his art most skillful was, and he
Exceeded all others in that mysterie
Of cutting of the stone; for by his skill
He many healed, but never one did kill.
His loving wife, from his own wealth, did raise
This monument and writing to his praise."

But to resume our list of distinguished Scotchmen:—

Patrick Blair was the author of "Miscellaneous Observations in Physic, Anatomy, Surgery and Botany," and he wrote the first complete work in the English language, on the "Sexes of Plants." He died in 1728.

Charles Alston, botanist, a student of Boerhaave, wrote a learned essay on Opium. The inscription on his tombstone in Greyfriar's Churchyard, Edinburgh, reads:—

"Charles Alston, King's botanist in Scotland; fellow of the Royal College of Physicians, professor of medicine and of botany in the University of Edinburgh, died November 23d, 1760. His merit as one of the distinguished founders of the Medical School at Edinburgh ought never to be forgotten by the city and the College."

Alexander Monro, primus, with an education culled from the flower of European Capitals, under the guidance of Cheselden, Hawksby, Chowel, Bouquet, Thibaut, and Boerhaave, born in London, 1697, was appointed professor of anatomy in the University of Edinburgh, when he was but twenty-two years of age. With Alston, Sinclair, Rutherford, and Plumer, he built it up to be the most celebrated and frequented in Europe. His work on "Osteology," published while he was yet under thirty, was

translated into the principal European languages.

Alexander Monro, secundus, studied under Albinus and Meckel. He was elected assistant to his father, the first Monro, at the age of twenty-three. He published three large folio volumes, magnificently illustrated, respectively, "On the Structure and Functions of the Nervous System;" "Structure and Physiology of Fishes, compared with those of Man and other Animals;" and, "A Description of all the Bursæ Mucosæ of the Human Body, with Remarks on the Accidents and Diseases which affect these several Sacks, and the Operations Necessary for their Cure."

William Cullen, at different times professor of chemistry, materia medica, and theory and practice of medicine, in the University of Edinburgh, has laid, not only medicine, but other sciences under lasting contribution to his ability. He expanded chemistry so as to lend its magnetic aid to the improvement of arts and manufactures; and he is supposed to have suggested the theory of latent heat to his pupil, Black. He was a successful lecturer, a thorough clinical teacher, and the author of that system of pathology known as solidism. "By teaching that the nervous system is the sole, primary seat of disease, he indirectly encouraged those minute researches, which, in the next generation, gave use to the capital discoveries of Bell, Shaw, Mayo, and Marshall Hall." The solid pathology was also the first effective barrier against that constant and indiscriminate venesection which had prevailed for many centuries.

James Gregory succeeded Cullen, and, for thirty-two years he conferred almost equal lustre upon the chair of practice of physic as his illustrious predecessor.

John Brown, born in 1735, was the son of a day laborer. But this did not deter him from fostering his innate genius by study. His biographer tells us that at an age when most children are only beginning their letters he was far advanced in Latin. He came to Edinburgh at the age of twenty, and while he studied medicine supported himself as a "quizzer," or, as they term it abroad, *gripder*. His abilities recommended him to Cullen, to whom he became Latin secretary. He afterwards quarreled with his great friend, and this stimulated his ambition to rival Cullen as the founder of a school of medicine. He devised, accordingly, what is known as the "Brunonian System," which consists in the adminis-

tration of a course of stimulants, instead of the so-called antiphlogistic remedies, as a method of cure. He had the merit of practicing as he preached, for he died in London, in a fit of apoplexy, in 1788, brought on by a course of long intemperance.

The next fames that ring out upon us are those of the Bells. John Bell was an eminent surgeon, and, moreover, a man of distinguished, general, literary accomplishments. He was the author of works on "Wounds," "Principles of Surgery," and "Anatomy." The latter was in three volumes; the engravings of bones, muscles, and joints, illustrating the first volume, were drawn by the author. He died at Rome, in 1820, whither he had gone for the benefit of his health.

Charles Bell, an alumnus of the University of Edinburgh, built up his fame in London, whither he removed in 1804. There he published his "Anatomy of Expression," "System of Operative Surgery," and his world-famed discoveries regarding the nervous system. Prior to Bell's discovery it was the general belief that all the nerves were alike, and that diverse nervous manifestations depended upon the number and not kinds of nerves. But even before he had left Edinburgh, a suspicion had grown upon the mind of Bell that this prevalent opinion was erroneous. He found that the nerves were distributed into different classes, to each of which belonged its proper function. He saw, for instance, that the two roots of a spinal nerve impart the different powers of motion and sensation. This discovery, as wonderful as that of the circulation of the blood, astonished the whole medical world; it was a revelation that had remained unknown till now, and when announced could not be controverted, although after its full value became known, as is usual in such cases, attempts were made to deny Bell the merit of it. On the accession of William IV to the throne, Bell, in company with Brewster and Leslie, was knighted. After remaining in London thirty-two years he returned to his native city of Edinburgh, to accept the appointment of professor of surgery in the University. He died suddenly in 1842, like John Hunter, by excitement brought on in regard to a medical bill.

To the Hunters, who were Scotchmen, we have already paid passing tribute, and time now makes us close this review of distinguished medical Scots by simple mention of the For-

dyces; Sir William Hamilton; Andrew Duncan, founder of the *Edinburgh Medical and Surgical Journal*; Andrew Duncan, Jr., editor of the first edition of the *Edinburgh Dispensatory*, the discoverer of cinchonin, and the first to introduce the science of medical jurisprudence into Great Britain; Sir Gilbert Blane, head of the British Navy Medical Board, who lessened the total amount of disease in the navy one-half by the introduction of lemon-juice for the cure of scurvy; John Barclay, the author of our present system of anatomical nomenclature; James Currie, who threw much light on the medical uses of water; Matthew Baillie, nephew of the Hunters, an industrious laborer in the field of morbid anatomy; John Abernethy, the founder of the Physiological School of Surgery, and the first to tie the common iliac artery; Robert Watt, author of the "*Bibliotheca Britannica*;" Benjamin Bell, a distinguished surgical writer; John Abercrombie, the eminent pathologist and physician; John and Allan Burns, talented anatomists and surgical writers; John Reid, the physiologist; and Robert Liston, the unrivaled surgical operator.

Syme and Simpson were so lately gone that their shadowy forms still seemed to linger round the college halls.

Out of this long list we shall find but few graves whereat to pilgrimage. Time is a ruthless old iconoclast in these northern climes, making

"Gravestones tell truth scarce forty years."

Cullen lies buried in the churchyard of Kirk Newton, near Edinburgh. Black keeps Alston company in old Greyfriars Churchyard. Sir William Hamilton lies in one of the vaults of St. John's Chapel. In St. John's Churchyard is the grave of Syme. No monument or stone of any kind crowns it, but loving hands leave garlands there, and flowers bloom upon it. Across the path from Syme lies William Pulteney Alison, formerly Professor of Practice of Medicine in the University of Edinburgh. A few steps beyond is the grave of a staff-surgeon. These graves are in a little walled enclosure, above which, like a sentinel, towers the old castle of Edinburgh.

Simpson's monument rises proudly from the crest of a terrace in the Edinburgh Cemetery. On its base is cut, in enduring letters,

"Nevertheless, I live."

Truly, he lives! Lives on earth, blessed of

women whom his kindly genius has made to escape the pangs of parturient pains: lives above, as one who kept his earthly lamp always well trimmed and burning, to guide alike the feet of his professional brothers and his fellow men.

Not "without reverent awe," gentlemen, "have we put by the cypress branches and the amaranth blooms" that cover these old tombs. We are aware that no touch of ours can add a bit of brightness to the many names mentioned this morning; rather do we hope for the reverse, and wish to shine by the reflected light which they throw down upon us from dim and dizzy distance. But, as their names are indelibly cut on the flint of this world, as they were the engineers to run the air lines between the cardinal points of our science, and as they not only first cultivated the field of our profession, but cleared it, even to its stumps of fallacy and its roots of obscurity, it is certainly ours, as students of medicine, to profit by the example they set us.

The obstacles to our path can be but sticks and stones compared to the blank rock wall, and tangled, pathless forest that, on all sides, presented to them. Therefore, shall it be said of us that, in these days of almost royal roads to knowledge, we gave ourselves up to mental sloth, proved ourselves inferior in thought and work to those who preceded us, and that we let run into caves and marshy places the pure stream of scientific truth that flowed for us? Or, will we commence to-day, and by the exercise of that intellect which God has given us, so do our duty to ourselves as to make us worthy of the profession we have chosen, the days we live in, and the future we hope for?

Carlisle says that "genius is simply cultivating the capacity for taking infinite pains;" and surely this is better than cultivating the capacity for infinite carelessness. It is just as easy to study a line as to skim a page, to dissect as to mutilate, to listen as to be listless, to labor as to wait.

"In the elder days of Art,
Builders wrought with greatest care
Each minute and unseen part;
For the gods see every where.

"Let us do our work as well,
Both the unseen and the seen;
Make the house where gods may dwell
Beautiful, entire, and clean.

"Else our lives are incomplete,
Standing in these walls of Time,
Broken stairways, where the feet
Stumble as they seek to climb."

COMMUNICATIONS.

AFTER-TREATMENT BY MERCURY, IN GRAVE INJURIES AND LIFE-JEOPARDISING SURGICAL OPERATIONS.

BY M. L. KNAPP, M.D.,
Of Cadereyta, Nuevo Leon, Mexico.

In my early career as a practitioner, I was summoned in great haste to assist a woman in child-birth, and found her dying, just gasping her last breath, consequent on rupture of the womb and internal hemorrhage. By wish of her husband and friends, I performed the Cæsarean section instantly, after breathing had ceased, in the hope and expectation, indeed, of saving a young Caesar alive; but for want of experience in keeping up artificial respiration, my hopes and expectations were not realized. Had I then possessed the experience I have since acquired, my efforts might have been crowned with an exultant success. I have since resuscitated many an asphyxiated infant at birth, and two of the number after perseverance in keeping up artificial respiration in each case for more than an hour. My method has been to inflate the lungs of the child gently, by breathing into them expirations of fresh air inspired into mine, and alternately compressing the child's thorax. The child should be held by a nurse, warmly wrapped up, as in the act of nursing at the left breast, the head gently inclined over the left arm. The accoucheur, seated close to the left side of the nurse, holds the nose of the infant with his right hand, and with his left hand grasps the thorax for making the alternate pressure. When seated before an open door or window, the child's mouth washed and wiped clean, artificial respiration can be kept up for an hour without fatigue, and the pitapat of the child's heart listened to with the greatest convenience, to note the progress made. With quick inspirations of fresh air, and not too forcible inflation of the child's delicate lungs, the prospects of resuscitation by this method are certainly good, for I have proved them by experience. The swinging plan, spoken of by Dr. Lusk as Schultze's method, and which proved successful with him, may be tried, if preferred, but seems unsuited to a winter temperature. (See *New York Medical Journal*, 1873, p. 89).

The Cæsarean operation, though life-jeopardising, is not always fatal to the mother, for under rest, quietude, and the appropriate regimen

usually prescribed for lying-in women, recovery sometimes takes place; but what *medical treatment* is the most life-saving after this mortal cutting open of a woman, and after all mortal wounds and life-jeoparding surgical operations, is an open question. The experience of any practitioner, therefore, is relevant in this important matter. Experience has taught us great lessons, both of boldness and prudence in surgery. What were, in times past, considered unjustifiable methods, have from experience become life-saving means to thousands, under the extreme emergencies in which suffering humanity has been brought to plead for relief at the hands of the operative surgeon. Not only is the Cæsarean section now considered a justifiable resort for endeavoring to save the life of both mother and child, when delivery *per vias naturales* is impracticable (Dewees and others), but ovariectomy also is now enrolled among the legitimate operations of surgery. The experience of surgeons during these latter years has established this formidable procedure (Atlee, Peasely, Sims, in America, and Wells and others, in Europe); and also other daring modes of endeavoring to save life by surgical operations, which need not be specified; but as to *after-treatment*, I do not see anything new, any new principle advanced of general applicability; we still have to rely on general principles, rest, quietude, the antiphlogistic regimen, *vis medicatrix nature*, low diet, opiates and cooling applications. Every practitioner has to depend on these general principles for the safety and recovery of his patient after every life-jeoparding operation, and also after mortal wounds and the gravest of injuries. But the *vis medicatrix nature* generally overshoots the mark, and against this blind curative force we have need to hold a check-rein. Verily we need have some prophylactic against the inflammation which nature sets up and carries to excess; and have we not this prophylactic in the proper administration of mercury?

If experience has rendered surgery very bold, it has also made it very conservative, and corrected former abuses. The abuses of the pioneers in lithotomy and trephining which modern experience has corrected, are sufficient examples. Empirical and conservative surgery have thus conducted this important branch of the healing art to its present improved status. It is not perfect yet. The institutes of surgery are not fixed or settled principles, but like those of medicine are eminently progressive. Improve-

ments are daily taking place in both. The two are, indeed, so blended, that however bold and dextrous may be the operator, if he be not a good *medical surgeon* his patient may die for the lack of skill in the after-treatment. I witnessed glaring illustrations of this in hospital practice in Matamoros, after the siege by Carvajal, in the winter of 1861-2. Low diet and purging constituted the *general principles* for the treatment of the wounded, even after the inflammatory stage had passed. In a surgical case requiring a life-jeoparding operation, though assisted by operative skill *par excellence*, unless the after-treatment be conducted on like excellent principles, the patient may die from the imperfection of the general principles and *therapia* upon which the cure is conducted. To be a good *medical surgeon* is the highest attainment in the healing art. To conduct safely to the shores of health the mortally wounded, and those who have passed the ordeal of the gravest excisions of the surgeon's knife, by skillful after-treatment, is to exercise the highest functions of a practitioner.

In the year 1860 I sought relief from repeated attacks of hæmoptysis, by a change of climate from the Northern United States to the warm region of Southern Texas, and in 1862 came over into Mexico and located myself permanently in the city of Cadereyta, thirty miles east of Monterey, under the eastern aspect of the lofty cordillera known as the Sierra Madre. I have not been disappointed in my hopes of climatic benefits in this land of oranges and goat's milk, where the mercury is rarely depressed below 32° Fahr., and my observations in an extensive practice in this hot climate have added some lessons (thought worthy of record), to my previously acquired stock, from which I have deduced at least *one rule of practice*, new, I think, in medical surgery, and which I respectfully submit to the consideration of the profession, and particularly to those who are accustomed to perform life-jeoparding surgical operations. The large percentage of mortality after the great operations in surgery justifies the measure. It may turn out that the *rule* which has saved valuable lives in my practice has been adopted by others, but if so, I have no knowledge of it.

Every practitioner of medicine knows full well that inflammation of the brain is a disease of much more frequent occurrence in hot than in cold climates. I have met it so frequently here, in its furious forms of meningitis, and comatose

forms of cerebritis with tonic spasm, and have achieved such admirable results from the administration of mercury, that its prophylactic effect in injuries of the head after the operation of trephining, was, by analogy, suggested to me, and has now become the rule of practice with me in all these cases. And furthermore, I have extended the rule (convinced of its great utility) to all mortal wounds and injuries, whether by accident or surgical operation. By the adjective *mortal*, I mean very grave—a wound, an injury, or an operation, jeopardizing life. I adopt the rule where inflammation has set in, to arrest it, and I apply it ere inflammation has supervened, to prevent its occurrence, for in nine cases out of ten where death occurs, if the immediate shock has been survived, it is the result of inflammation and its products, which the judicious and timely administration of mercury prevents, as we all know full well by practical results.

Practitioners progress to improved methods by degrees, step by step. It was not until after losing some cases of inflammation of the brain that a more heroic use of mercury was resorted to, and it was not until after repeated salutary results in these cases that I was led, by analogy, to administer mercury as a prophylactic in injuries of the head and after the operation of trephining. Let us glance a moment at the old method of treating fractures of the cranium, also at the present status of surgery in this regard, and then at the improved method I suggest.

It appears, by the records of surgery, that it was formerly the practice to trepan for the slightest fractures of the skull, even fissures of the cranium, whether attended by symptoms of compression or not; that trepanning was the rule in all fractures of the cranium for removing bad symptoms, when present, and preventing them from supervening when absent; that surgeons thought it necessary to explore and trepan out every fissure by repeated borings; that in operating for the removal of a coagulum they made as many openings as would uncover the whole of it; and that all this was done to remove danger! Mr. John Bell gives the following extract:—"I, the undersigned, Philip Count Nassau, hereby declare and testify that Mr. Henry Chadborne did trepan me in the skull twenty-seven times, and after that did cure me well and soundly. August 12, 1664." (Pirrie).

In the present day the operation of trephining is called for, in the opinion of surgeons, for simple fracture with depression, punctured fracture without comatose symptoms, and for abscess and coagula when the symptoms indicate their presence. In all cases the indication is to prevent inflammation by the antiphlogistic regimen, low diet, rest, quietude, and cold applications (Pirrie). Nothing is said, be it observed, of the administration of mercury to this end, the great controller of inflammation, nor does any author recommend it as a preventive of inflammation in these cases, that I am aware of. Compound fracture of the cranium is followed very generally by inflammation of the brain, and it would be of no use to trephine when inflammation is once formed, for if inflammation comes on, the patient will die whether you trephine or not, and the operation will add to the danger of the inflammation (Sir Astley Cooper), and this is the law or rule of the present day. The administration of mercury is not recommended, as a rule, as a means of controlling the inflammation after it has supervened, nor of preventing it from supervening, neither by Sir Astley Cooper, Sir Benjamin Brodie, Abernethy, Sir Philip Crampton, Pirrie, Liston, Hunter, nor by any American surgeon, to my knowledge; but I have found it adequate to control the inflammation and save life in these cases. That some surgeons have doubted the correctness of Sir Astley Cooper's rule in compound fracture of the cranium is true, but without suggesting the further resource of our art, the constitutional effect of mercury.

I will illustrate my views by a few cases that have occurred in my private practice.

CASE I—COMPOUND FRACTURE OF THE CRANIUM.

A peon hoeing corn on a hacienda, ten miles from this city, was struck by a companion peon with the poll of his hoe, on the left superior region of the os frontis, and an oblong-square piece of the cranium broken in and depressed upon the brain, of the size of the head of the hoe, a piece an inch and a half long by three-eighths of an inch broad. The external table was neatly broken in of this size, without fissures, but, of course, the internal table was shattered more extensively. The hoes in use here are made with a longitudinal steel poll standing out from the back of the eye, for rapping off the mud in irrigating. The offense the peon had committed was drinking water out of the other's gourd-

shell! He caught him in the act, and dealt the blow from behind while he was drinking. The wound was thus longitudinal, and about an inch to the left of the median line.

All offences of this kind are immediately brought to the notice of the *Juzgados Constitucionales*, one or other of which tribunals, second and third Alcaldes presiding, whose jurisdiction equals that of a justice of the peace, orders the offender arrested and brought to trial, and the sufferer to be cared for by doctors and nurses.

A Mexican physician, who was only an apothecary, was called by the proprietor of the hacienda, and the next day the wounded man was ordered by the Alcalde to be brought to the city, and Dr. Berrian, a confederate army surgeon who was then practicing here, was associated with the Mexican doctor in treating the case. Under their care the case ran till the afternoon of the fifth day without operation, when, the comatose symptoms becoming much aggravated, I was summoned by the Alcalde and ordered to take charge of the case, and the other two were retired.

I found a compound open fracture, with depression, as described, the external wound suppurating, and symptoms of compression present, aggravated by inflammation of the brain which had set in, for the mother of the peon told me he had not been totally insensible until the day previous.

Trephining seemed to me to offer the only chance of saving the life of the sufferer; so I decided to operate, though inflammation of the brain had supervened, and treat the case afterwards as I would a case of idiopathic inflammation of the brain, or in other words, bring the patient under the constitutional effect of mercury as quickly as possible. Accordingly, I operated at once, applying one crown of the trephine only, which enabled me to extract the atrophied piece of bone, and remove all the spiculæ; after which the wound was washed and dressed properly. The patient showed some little sensibility under the operation, but was not relieved of the comatose symptoms after the depressed bones had been extracted.

After-treatment.—I did not institute a venesection, for much blood was lost by cutting the temporal artery in the operation. Ten grains of calomel and one of opium were ordered every six hours, the patient to be washed all over and strong mercurial ointment rubbed in epidermically, with diligence, once a day. Forty-eight

hours after the operation the gums began to show the constitutional effect of the mercury, when the calomel and opium were suspended and the patient again washed. On the third day the patient awoke from his lethargy and called for food and drink. He recovered, and is still living and in good health, eight years after the operation.

That this case would have terminated fatally *without* the operation, there can be no doubt, I think. And what would have been the result *with* the operation had not mercury been administered? Let Sir Astley Cooper answer: "Compound fracture of the cranium is followed very generally by inflammation of the brain, and it will be of no use to trephine when inflammation is once formed. It might be thought that it would be time enough to perform this operation when inflammation had appeared; but this is not the case; for if inflammation comes on, the patient will die whether you trephine or not; and you will be so far from arresting its progress by trephining, that the operation will add to the danger of the inflammation. When inflammation of the dura mater and membranes has been excited by depression of the bone, you cannot retard the progress of death by performing the operation." (See Pirrie's Surgery, p. 209).

After-treatment by mercury, then, saved this life; no other logical conclusion can be drawn.

CASE II.—CONCUSSION AND ABSCESS.

A middle-aged man was knocked down by a blow on the side of the head with a club, in a fight, and the authorities assigned the case to the surgical care of Dr. Berrian. After recovering from the concussion the case went on well enough until the fourth or fifth day, when comatose symptoms supervened, and the patient died on the eighth day. The authorities ordered me to make an autopsy and report the cause of death. I found an abscess on the dura mater, under the temporal bone, which was slightly fractured but not depressed, and an ounce or more of bloody pus on the membrane, which was extensively engorged with blood, and also the substance of the brain below. I reported the cause of death to have been inflammation and abscess of the brain from the blow received.

Had this case been assigned to my care I would have trephined the patient before the fourth day, to prevent the supervention of inflammation. I believe the medical surgeon will only

be acting up to the demands of a progressive science in ptyalizing every similar case of injury of the head, even though the injury may not be sufficient to cause inflammation. Such after-treatment, as a precautionary measure, can do no possible harm, in any event, and under an injury with strong predisposition to inflammation the ptyalism would save life. Inasmuch as we cannot know, in some cases of injury of the head, whether or not the internal table be fractured, or the dura mater separated, or what unfavorable result may follow, I have adopted the rule to ptyalize the patient in every case of concussion of the brain where the circumstances lead me to suppose there is any danger of inflammation following the blow, fall or injury. The following case is in point:—

CASE III.—CONCUSSION, WITH SYMPTOMS OF COMPRESSION.

A boy, seven years old, fell from an orange tree, in gathering fruit, about ten feet, to the hard ground, and was taken up insensible. The accident occurred early in the morning, before any food had been taken, and I saw the case some hours after, towards midday, the boy remaining in a comatose state. I examined the head very carefully, but could find no contusion; had the boy stripped naked, but no bruises appeared on the body. I ordered him held as if standing, and douches of cold water poured on him, and afterwards dried and laid in bed, and some sweetened milk given him by the teaspoonful, which he sipped. An injection of an emulsion of castor oil was ordered, which brought away faecal discharges in the afternoon, but still the boy remained asleep, as in natural sleep, without stertorous breathing, and so I found him the next morning.

The case ran on four days without any material change in the symptoms, and without any special treatment beyond nutriment, as above spoken of, and cooling applications to the head. Febrile reaction supervening on the fourth day, caused me to suspect a fracture of the base of the cranium, and on examination of the breech of the little sleeper, evidences of contusion were apparent in the discolorations present, and from this time forward the case was regarded as concussion, with *probable* fracture of the base of the cranium. The boy, in falling, had evidently struck the ground in a sitting posture, and the shock of the weight of the head upon the atlas and spinal column had produced the injury,

whatever it was, that developed the persistent comatose symptoms that followed.

Under this reading of the case I commenced the administration of mercury by inunction, and also with blue mass rubbed down in the sweetened milk. Evidences of ptyalism appeared in four days more, when the boy began to show symptoms of improvement, and on the ninth day from the injury became conscious. He recovered completely, without loss of sense, motion, memory or intellect; which favorable result I attribute to the administration of mercury. To me it is clear that it controlled the inflammation of the brain that was setting in, and which would probably have resulted in death under any other treatment known to our art. In the present state of our knowledge, therefore, *the rule* I have adopted is applicable in all cases of severe injury of the head, with or without comatose symptoms.

CASE IV.—CONCUSSION, WITH PROBABLE ABSCESS.

A major domo of a hacienda was thrown from his horse, and received a contusion on the left superciliary ridge of the os frontis. He was stunned for a time, manifested the usual symptoms of concussion, but the injury was not considered of sufficient importance to demand treatment. About a week after the fall he was attacked with intermittent fever, and came to the city for treatment, and fell under my care. He was very soon relieved of his attack of fever, but complained of pain in the head, and particularly in the region where he had received the injury. I purged him, and applied cold applications to the head, but he passed rapidly into a comatose state, and died in a few days. A post-mortem could not be obtained. Inflammation and abscess of the brain were doubtless the cause of his death. If I had ptyalized this case with dispatch, when first brought to my notice, his life would probably have been saved; but it offered before I had adopted *the rule*. Experience had not then taught me the value of this rule of practice in surgery.

[To be Continued.]

BILIARY CONCRETIONS DISSOLVED.

Report of a Case read before the Linn County Medical Society, in Cedar Rapids, Iowa, June 3d, 1873.

BY E. BURD, M. D.,
Of Lisbon, Iowa.

August 9th, 1871, I was called to see Mrs. A. P., aged forty-four. She had suffered

for twenty years or more from paroxysmal attacks every week or ten days, sometimes as often as two or three times a week, lasting for many hours, and accompanied by intense suffering. During these attacks she complained first of intense pain extending from the region of the gall-bladder anteriorly to the inferior angle of the scapula, followed immediately by severe straining and vomiting, together with severe cramping of the abdominal muscles. During these paroxysms she suffered the most intense agony. She rolled from side to side on the bed, rested on her elbows and knees, or was doubled up with cramp, which sometimes extended to the extremities, shrieking, praying, rolling, straining and vomiting. It was a terrible scene to witness. In a short time there appeared a swelling distinctly noticeable under the right inferior rib anteriorly, which increased in size until it became quite prominent, but was not very sensitive to pressure. After a time, varying from six to forty-eight hours, and during a fit of vomiting, she said, "I always felt something burst in my side," and immediately the vomiting and cramping ceased, the tumor rapidly diminished in size, and she was at rest, though sore, worn out and prostrated by her intense suffering.

She told me that she had been under the treatment of at least twenty physicians in Pennsylvania and here, and fully as many quacks, none of them affording her any relief.

One of the physicians pronounced the distended gall-bladder to be a malignant tumor, and advised its removal by operation. Others hooted at the idea of having a swelling under the rib and its bursting in her, while others pronounced it a "strange kind of liver complaint;" this wise decision was arrived at on account of the jaundice which appeared during or just after a long continued paroxysm, but they could neither explain the case nor do anything to relieve it. She had been dosed with calomel and morphia until the poor woman was reduced to a mere skeleton.

Saw her first August 9th, 1871, and after the paroxysm I explained the disease to her friends as being caused by the passage of gall stones, and requested that her stools be washed and search made for the stones, but I need scarcely add that this request was not complied with.

Treatment.—During the paroxysm I gave chloroform in doses of fifteen to thirty drops, repeated every thirty minutes, to relieve the

pain and relax the walls of the gall-duct, in order that the calculus might the more readily pass.

During the interval the treatment was directed to prevent the formation of the calculi, or to dissolve them as soon as formed. For this purpose I resorted to a mixture of equal parts of Venice turpentine and sulphuric ether.

"The use of oil of turpentine in cases of this affection was first proposed by Vallisneri, and afterwards, in 1792, by Durande, of Dijon, who reported seven cases of its complete success. He made use of a mixture, sometimes of equal parts of the oil and sulphuric ether, and sometimes of two parts of the former to three of the latter article. Of this a teaspoonful was to be taken every morning, fasting, and followed by a glass of whey or other diluent. Its good effects were also attested by Scemmering, Richter, and other eminent physicians. More recently Martin Solon has published a marked case of its success. Some authorities contend that the medicine acts as a solvent of the concretions of the gall-bladder or ducts, while others deny this operation, and refer the effects observed to an excited peristaltic action communicated from the duodenum to the gall-ducts" (Stillé's Therapeutics, Vol. i, p. 659). Under the use of the above treatment she gained strength, the attacks became less and less frequent, until they ceased, and she began to grow fat. She then became pregnant, and becoming tired of taking medicine, she discontinued it for some months. She had another attack in January, 1873, after a rest of fifteen months, since which time she has resumed treatment, and has had no more trouble, and is now fat and well.

"The ingredients of gall-stones are, cholesterine (commonly from 80 to 90 per cent.), cholechrome, or coloring matter, combined with earthy and alkaline salts, such as phosphate and carbonate of lime, and magnesia, together with biliary and fatty acids. Gall-stones arise from a decomposition of the bile, akin to putrefaction. The cholesterine of human bile is dissolved in the taurocholate of soda. But as soon as the acid of this salt is decomposed the cholesterine is set free, crystallizes, and deposits upon any particle that may happen to be within easy distance, in the manner of all crystals, which like to post themselves upon prominent bodies" (Thudicum, p. 167).

The ether acts only as a solvent for the fatty matter (cholesterine), even when this body is

plunged in a bath of it. Some authors claim that ether acts only by relaxing the spasm so that the calculus can pass, while others claim for it a solvent action. I believe the latter to be the correct theory.

Chloroform has also been used with success in this connection, and as the gall-stones are readily soluble in it, it follows that if the solvent action is the one required, chloroform would be superior to ether. Dr. Thomas H. Buckler claims great success with the chloroform used as above directed for ether.

I believe that with ether or chloroform, uncombined with turpentine, gall-stones can be successfully treated. Should another case present itself I shall try them singly and if success follows it will be a great relief to the patient, as the mixture of turpentine and ether is a very unpleasant dose to swallow, as it must be, on an empty stomach.

CASES OF FRACTURE OF LOWER EXTREMITIES TREATED WITHOUT SPLINTS.

BY J. F. ATKINSON, M. D.,
Of Lexington, Mo.

Much has been said in praise of this, that, or the other splints in use, and out of use. Fifteen years ago I abandoned the use of them all, and regard their use in fracture of the lower extremities as inquisitorial and demanding reform. I therefore consigned them all to the rubbish pile, never more to be resurrected.

You then ask, What is your treatment in recent fracture of the lower extremities? I reply in as few words as possible, consistent with the nature of the subject, looking at the same time for an attack from splint inventors and vendors; but this shall not deter me from what I regard my duty. The country demands the reform.

If called to a recent fracture of lower extremity, I adjust the limb upon a straight mattress, just so far as it can be done without pain or torture to the patient; then support with sand bags, and apply cold-water dressings for ten or twelve days, during all of which time it is a matter of perfect indifference whether the parts are in coaptation or not, or whether the limb is straight or crooked, for the patient will be more comfortable with the fracture unadjusted than adjusted, as a rule, on account of the irritability of the muscular fibres, as well as the inflammation that occurs subsequently, putting them to their utmost tension.

What surgeon of any experience does not know that it requires almost a superhuman effort to overcome the contractility of the muscles when injured, torn and lacerated, all of which has to be overcome at the expense of fracture of the fibrilla, if perchance the parts are reduced to coaptation? And then comes the tug of war; and this is a war against the persistent contractility of the muscles, and against sloughing from the pressure induced by the splints, of whatever kind, applied. Aye, but says the patentee, my splints are exempt from all this. *Hope they are*, but none at all are perfectly free from objection. But what of extension and counter-extension? That question is easily solved. None whatever is necessary until the irritation and inflammation is entirely overcome by time and the powerful therapeutic use of cold water, at which time the provisional callus (so called by Dupuytren) will be thrown out, and all the soft tissues of the limb will have become as elastic as a flannel rag, and the fractured bones will be easily, if not already, reduced to perfect coaptation. And now the patient is bed-ridden, so to speak, and it will be an easy matter to keep him quiet for six or seven days, at which time, by the application of a light pasteboard support, he can travel at his will, on crutches, without the slightest distortion.

A case or two will give the reader some idea of the practical results of the plan proposed here:—

Mr. M. S., æt. 25. Comminuted fracture of femur, lower third; used straight mattress, sand bags and cold-water dressing. Twelfth day invited Dr. F. C. to witness the adjustment of fracture, but found it already in perfect coaptation. This had been accomplished by his attendants by simply elongating the limb each day, under my directions, the patient never having been conscious of the time of the perfect adjustment of the parts. The weight of the body being all that is necessary for counter-extension, provisional callus fully organized, and the patient walked on the twentieth day from injury, two or three hundred yards, using crutches, the limb slightly supported with binder's board. There was no shortening nor limping sequent in this case, although his leg often, for the first week, appeared to have two knees, as he was permitted to lie on either side without the least regard to the limb being straight.

CASE II.—C. S., boy, aged 6 years; double fracture of femur, upper and lower third. Treated

as above. Fractures adjusted 11th day; sand bags applied to keep the parts in coaptation; perfect union on the 18th day. Dr. W. P. B. assisted me in adjusting this fracture, and can testify to the perfect recovery without the slightest deformity.

CASE III.—L. R., boy aged 16. Fracture of the tibia and fibula, middle third. Treated as above. Extended the limb slightly each day after the 6th. Tenth day adjusted, in presence of Dr. L. S. B., without extension or counter-extension. Patient recovered perfectly in 28 days, although this case was compound and attended with considerable sloughing, as the weather was extremely hot.

I could give many other cases treated upon the same plan, and invariably with perfect recovery.

My early teaching and practice were the books and the splints, all of which I now abhor, and regard as malpractice, as applied to fractures of the lower extremities, and, God being my helper, I shall never apply a splint again in any case of the above-named fractures, and trust that this reform, so necessary, will become general.

MEDICAL SOCIETIES.

SCHLESWIG SOCIETY FOR HOME CULTURE—MEDICAL SECTION.

[Translated, by request, by Dr. MAX HELLER, from the *Medizinische Centralzeitung*.

MEETING OF DECEMBER 19TH, 1873.

The Pneumatic Treatment.

Private docent, Dr. Sommerbrodt, gave the thesis that there is no contradiction between the facts that during the past decennium the treatment in compressed air was so highly recommended for emphysema and asthma, and now, since 1870, the exhalation in rarefied air is advocated with the same warmth in the treatment of the same disease. As evidence of the correctness of this thesis, the lecturer then takes the theoretic view, referring to the physiological examinations of Vivenot upon the effects of compressed air, and adds thereto communications upon practical results.

For instance, Sandahl, in Stockholm, treated 479 cases of emphysema with compressed air, among which were 41 with emphysema without catarrh, of which 40 were permanently cured, being 97 per cent. Of those complicated with catarrh and asthma he cured 76 per cent. Berlin (Montpellier) cured of 13 cases of emphysema all; of 92 complicated with catarrh 67. Brunich cured 70 per cent., etc.

The inconvenience and trouble to the patient,

connected with seeking the places where pneumatic cabinets are established, induced Hauke, of Vienna (1870), to invent a transportable apparatus. On reflecting that in emphysema the expiratory forces are chiefly weakened, he concluded to come to the patient's assistance through exhalations in rarefied air.

The practically organized experiments with Hauke's apparatus, by Mader, of Vienna, were satisfactory. Theoretically it is easily proven that exhalation in rarefied air accomplishes the indications even better than that which a treatment in the compressed air of the pneumatic cabinet could fulfill, as follows: "before all else, by clearing the alveoli of the lungs of the residual air, which contains an excess of carbonic acid gas, which paralyzes the contractile element of the lungs, increasing the vital capacity and increasing the positive pressure of expiration as well as the negative pressure of inspiration.

The Waldenburg experiments (1871), with the manometre, for the lungs, proved among others the following results, closely calculable: that emphysema of the lungs is an insufficiency of inspiration, hereby being the justification to treat the same with exhalation in rarefied air, given in a much more pregnant manner. Waldenburg therefore felt himself called upon to free the Hauke apparatus from several evident disadvantages. In this he was thoroughly successful in the pneumatic apparatus, which he described in October of this year (1873), and with which he has already accomplished extremely beneficial results. In the newest phases of the treatment of emphysema and asthma, the matter has been disparaged, as Waldenburg studied only the influence of rarefied and compressed air (by in- and exhalation), upon the heart and blood vessels. After communicating these results the lecturer came to the conclusion that it is rational to treat uncomplicated emphysema with exhalation in rarefied air, and that complicated with catarrh, simultaneously, in the same manner, with inhalation in compressed air, as the latter method increases the pressure and flow of blood in the aortic system, and decreases the discharge of the blood in the right ventricle of the heart; consequently it counteracts the excessive flow of blood to the lungs, which are the conditional and sustaining causes of catarrh.

Dr. Sommerbrodt added remarks upon patients treated by him by this method up to the present time.

—A story is related of a Chicago physician, who is also an extensive real estate operator, that recently he prescribed some pills for a lady, at a time when he was very much absorbed in one of his land transactions. She asked how they were to be taken. "A quarter down," said the doctor, "and the balance in one, two, and three years."

—Typhus fever and small-pox have broken out in Stockholm, in epidemic form, and the diseases are creating terrible havoc.

EDITORIAL DEPARTMENT.

PERISCOPE.

Treatment of Amenorrhea by Electricity.

In the *Medical Times and Gazette*, of London, Dr. Julius Althaus gives the following successful treatment of a case which, he adds, was pronounced incurable by Professor Fordyce Barker, of New York:—

An American lady, aged thirty-seven, had her first confinement in March, 1871. The child was full-grown, but stillborn. The fetal movements had suddenly ceased about a week previous to delivery, without any accident having occurred to the mother. The body of the child was found to be decomposed when born, and forceps had to be used. The mother was very ill for a considerable time afterwards, and she never saw any further trace of the menstrual discharge, although previous to her pregnancy she had always been perfectly regular. She underwent much treatment, and ultimately consulted Dr. Fordyce Barker, of New York, who pronounced the case to be one of "atrophy of the ovaries," and said that nothing could be done to restore the function of those organs. In May last the patient came to England, and being very anxious to have children, she consulted Mr. Spencer Wells, who discovered a slight degree of retroflexion of the uterus, which he replaced by the sound, and kept up by a pessary. He believed the amenorrhoea to be owing to a torpid condition of the ovaries, and sent the patient to me with the request to use electricity for rousing their function.

The general health of the patient was at that time quite satisfactory, and therefore no medicine was given. There had never been any vicarious menstruation or molimina. I induced catelectrotonus of the ovaries by placing the negative electrode of the constant battery alternately to the right and left ovarian region, putting the anode alternately to the lumbar spine and to the os uteri by means of an insulated sound. A current of from fifty to sixty cells of Daniell's battery was used, and the action of it kept up for fifteen minutes at a time. After a few such applications, the patient said that she felt the same sensations which she had always felt just before the period used to come on, viz., persistent uterine pain and frontal headache, chiefly in the right side of the head. A slight mucous discharge from the womb began at the same time. The galvanic current was now used on twenty-two different occasions, and the general sensations of the patient at the end of that period were such as to fully convince her that the catamenia were impending.

This was towards the end of June last. External reasons now obliged her to leave London, and I did not see her again until November 7th,

when she informed me that she had been disappointed in her expectation. The sensations which she thought premonitory of the occurrence of menstruation had disappeared within the first few days after discontinuing the galvanic treatment; the discharge from the womb had likewise ceased, and no sign of the period manifested itself. She was anxious to give the treatment a further trial, and it was therefore now resumed. Within the first few days the symptoms which she had felt in summer returned, viz., uterine pain and frontal headache. Shortly afterwards a thick mucous discharge from the womb was established, which was on one occasion sanguinolent, and so acrid that it made the inside of the thighs sore; for the relief of which cold cream was not sufficient, but fresh applications of the benzoated ointment of oxide of zinc were found requisite. The current was now used thirty times. The sensations previously described ceased, while the discharge persisted.

The treatment was now interrupted for ten days, and resumed on December 22d. After three more applications the period came on Christmas day, to the intense gratification of the patient. The flow was, for the first twelve hours, quite as abundant as it had ever been before. It then diminished, and ceased altogether four hours afterwards; but was succeeded by a dark mucous discharge, which lasted two days longer. As it appeared to me that this first response of nature had been very imperfect, I advised another short course of treatment just previous to the time when the next period would be expected. The patient accordingly came to me again on January 13th, and had eight more applications of the current. Menstruation returned on January 22d; it was of a particularly good character, and went on abundantly for four days. As, therefore, not only a satisfactory quality, but also decided periodicity of the ovarian function appeared now to have become established, I discharged the patient from further attendance, and she left England for Italy shortly afterwards.

Artificial Rest in Pleurisy.

Dr. Roberts says, in the *Practitioner*:—In the early stage of the disease I would strongly recommend that a trial should be given to the plan of *mechanically fixing the entire side* by one of the methods to be now described. In order to be of any use it should be done effectually, so as to restrain the movements as much as possible, and the sooner the application is made, the more likely is it to be of service. The plan I originally adopted was the following:—Strips of adhesive plaster, from four to five inches wide, were fixed at one end, close to the spine, and then drawn tightly round the side, as

far as the middle line in front, the patient being directed to expire deeply. In this manner the whole side was included, commencing from below and proceeding upward, each succeeding strip partially overlapping the one below. One was also fixed over the shoulder. Over this layer of plaster strips of bandage of the same width were fixed in like manner, having been previously dipped in a mixture of mucilage and chalk, such as is used in the treatment of fractures. Two or three layers of these were laid on, and then heated sand-bags applied, in order to dry the application as soon as possible. This is a most effectual mode of fixing one side of the chest, while it leaves the other quite free to act; and I would, by the way, commend it to those who are called upon to treat fractured ribs. The plaster adheres firmly to the skin, and the bandages adhere to the plaster, a firm casing being formed which will remain on any length of time. With regard to pleurisy, however, I have since then adopted another plan, which, so far as the disease is concerned, seems sufficiently efficacious. It is merely to use strips of plaster, putting on two or three layers in the following manner:—The first strip is laid on obliquely in the direction of the ribs, the second across the course of the ribs, the third in the direction of the first, about half overlapping it, the fourth the same as the second, and so on until the entire side is covered. A strip is also passed over the shoulder, which is kept down by another fixed round the side across its ends. Now it is difficult positively to prove that this treatment actually checks the course of pleurisy: but, taking a common-sense view of the matter, it is not improbable that such a result is anticipated; and, from my own experience, I have not the slightest doubt but that it is brought about. I have carried it out now in a good number of cases, and in all the course and termination have been most satisfactory, while relief to the pain and other distressing symptoms has been generally immediate. I feel convinced, also, that in many of those cases of extensive pleuritic effusion which come under observation, the accumulation might have been prevented or moderated had this plan of treatment been adopted at an early period.

Absorptive Power of the Large Intestine.

The London *Medical Times and Gazette* translates from Virchow's *Archiv* the researches of Drs. Czerny and Latschenberger, on this subject.

The general results arrived at were, almost in the author's words, as follows:—Soluble albumen is absorbed by the human large intestine unchanged as such, the intestine itself having no action on it; and the quantity absorbed is larger the longer it remains in contact with the mucous membrane. Irritation of the latter, as was shown where repeated measurements had reddened and inflamed it, stops absorption wholly or in part. The absorption of albumen is diminished also by the presence of

chloride of sodium, but the latter is itself absorbed in all conditions of the intestine. The albumen of eggs is an unsuitable form for absorption. Fat in emulsion is absorbed in quantities proportional to its concentration. Starch is also absorbed, but it is not as yet certain whether it remains chemically unchanged or is converted into sugar before absorption takes place.

It was also found that the portion of intestine used for experiment absorbed in seven hours about forty to fifty grammes of water. The largest amount of albumen which the same portion absorbed in twenty-four hours was one gramme and a half; and, as the whole large intestine is about four times as long, it follows that in twenty-four hours six grammes of a four and a half per cent solution of albumen would be absorbed. This is a quantity quite insufficient for the nourishment of a healthy man, who requires, according to Voit and Bauer, one hundred and twenty grammes per diem. Probably more would be absorbed if the concentration of the solution were increased.

The value of Czerny and Latschenberger's researches lies, of course, in the light they throw on the use of nutritive injections in various diseases. Judging from the above results, such injections are less valuable than is generally supposed; but we must beware of generalizing too much from observation on a single individual. Clinical experience has proved that life can be maintained for a considerable time by food given solely by the bowel; and we must recollect that, just as different stomachs have different digestive powers, so the large intestine may vary in its absorptiveness in different individuals. Moreover, as Leube has remarked in his experiments with pancreatic emulsions, the digesting, or rather the absorbing power of this part of the alimentary canal increases gradually with its use.

Treatment of Cerebro-Spinal Meningitis.

The advice on this subject given by Dr. Dowse, in the London *Medical Times and Gazette*, is as follows:—

1. It has to be considered how to relieve the vessels of the cord, and to equalize the action of the vaso-motor system of nerves. Nothing appears to be of greater service in effecting this than the ergot of rye and belladonna. The former he has prescribed in decided doses, such as half a drachm of the powder every four hours; and the latter he has applied to the spine in the form of a belladonna paste, made by mixing the extract with one-third its weight of glycerine.

2. To check the reflex vomiting, small pieces of ice must be swallowed, not sucked, as the full effect of its sedative influence upon the stomach is then attained.

3. To relieve constipation, Dr. Dowse prefers the administration of a pill of the watery extract of aloes, for the reason that it acts upon the mucous membrane of the rectum, and dilates the hemorrhoidal veins.

4. To relieve sleeplessness, both chloral and bromide of potassium have proved ineffectual; but what he found of most service was a suppository of eight grains of the extract of henbane, with four of the extract of conium.

5. One essentially practical point must not be forgotten, namely, to keep the paralyzed bladder constantly free from urine. It is not sufficient to draw off the water night and morning, which is the course usually adopted, but a self-retaining catheter must be kept continually in the viscera.

6. In reference to diet, it ought to be both nutritive and stimulant from the first.

7. There is a stage in the treatment of this disease, when quinine in large doses becomes of the most signal value—at that crisis when exhaustion appears imminent; the skin covered with sweat; sudamina and bullæ over the body; temperature 102° to 105° ; pulse small, weak, and over 120. But more especially is quinine invaluable when rigors supervene; it never fails to have a good effect. But it must be given in ten or even twenty grain doses; and if the stomach cannot tolerate it, it must be introduced into the system by the rectum.

8. The detraction of blood, either local or general, is not advisable.

Treatment of a Case of Chronic Bright's Disease.

The annexed case and its treatment we take from the London *Medical Press and Circular*. It occurred in the Belford Hospital, under the care of Dr. James W. Allan:—

Mrs. Mel., aged 53, widow, a person of intemperate habits, was admitted to Belford Hospital on August 13, 1873. She stated that her trouble commenced about eight years ago. She had a dropsical swelling of the belly at that time, but she got medicine from the doctor which put it away, and she made a good recovery. About two years ago she had a similar attack, and again recovered. This present illness began about a month ago. While "tramping clothes," i. e., treading in a tub filled with water and dirty linen, she took a shivering. Felt very sick, but could not vomit; had pains in the small of her back. On this, as on previous occasions of illness, the urine became scanty and high-colored, and she required to rise frequently to void it. Tormented with great thirst and harassing cough. Patient is a flabby-looking woman. On examination of her person there was found to be a considerable degree of ascites and anasarca. Pulse 72; tongue pretty clean; bowels cleared out by castor oil. Urine found to be opaque and of a dirty straw color, and having a deposit. Strong acid reaction, decidedly albuminous (nitric acid and heat). Examination of sediment under microscope revealed epithelium from bladder, lithates (crystalline and amorphous), and one or two fibrinous tubercles, with entangled cells.

On August 16 the following treatment was prescribed:—Sinapisms to loins; occasional

compound jalap powder; mixture containing quinine sulph. and acid. nit. hydrochlor. dil.; and good diet, including four ounces of sherry.

September 7.—Patient is very much improved. Castor oil employed to keep the bowels open. She has suffered repeatedly and severely from cramps; these have been relieved after the application of flannels powdered with flowers of sulphur.

25th.—Complains of severe pains and "aleezy" feeling in right thigh. Pain in back removed by dry cupping. Saline aperients and mild diuretics were also employed in the treatment of this case; and patient was dismissed on September 28, in a very satisfactory state.

REVIEWS AND BOOK NOTICES.

NOTES ON CURRENT MEDICAL LITERATURE.

—The Alumni Association of the Albany Medical College is preparing a complete catalogue of the graduates. All such are requested to send their addresses promptly to Dr. Willis G. Tucker, Albany, N. Y. The Constitution and By-Laws, a neat pamphlet, will be sent them on application.

—The addresses at the last Commencement of the Georgetown University Medical Department were by Drs. R. Walsh, J. L. Elliot and Wm. H. Ross. Prof. Walsh boldly and wisely took grounds in favor of a more thorough medical instruction of the masses.

BOOK NOTICES.

A Treatise on Therapeutics, Comprising Materia Medica and Toxicology, with especial reference to the Application of the Physiological Action of Drugs to Clinical Medicine. By H. C. Wood, Jr., M. D., etc. Philadelphia: J. B. Lippincott & Co., 1874. 1 vol. 8vo, cloth. pp. 578.

This is the work of one whom the French would call *un medecin penseur*—a therapist who selects his drugs to meet a given case from the way they act on the body in health, from reasoning on their physiological effects, rather than from the dicta of clinical experience in disease. Indeed, the author calls the latter, somewhat contemptuously, "the old method of empiricism," and though in one paragraph of his preface he says "very much has been thus ac-

complished," in the very next one he reduces this "very much" to "scarcely anything beyond the primary facts that quinia will-arrest an intermittent, that salts will purge, and that opium will lull to sleep." Surely, we have a right to expect more consistency from one who boldly flings his contradiction into the teeth of those great clinical masters of this generation, Niemeyer and Trousseau, the former of whom called this "empiricism" "the only path by which therapeutic science can be advanced," and the latter of whom made it his boast, "*Je tiens d'être empirique.*" To exhibit drugs in disease, on account of their actions on the lower animals and on man in health, is a mere following of a *priori* assumptions, and reverses the rules of deductive science. It is a false passage, leading nowhere, or else into the patient's still healthy parts.

Conceding this radically vicious theory to the author, he certainly has worked up his subjects with no little labor and care. Of course, very much of his matter was at hand in well-known treatises; but we know too well the ear-marks of hard work in a book to deny its presence here. He avowedly sets little store by his own or any classification, and, without traveling out of our brief to discuss others, he is right about the one he has adopted. Medicines he classifies as systemic and non-systemic; the former again as general and local. Potash is a systemic remedy, soda a non-systemic one; and if the reader can guess why the distinction, either before or after reading the book, he is a smart fellow.

The work is handsomely printed on excellent paper, and the proof closely read. But if we may be pardoned a suggestion, Murray's Grammar is a good book for any man to read. Not to go further than the first paragraph of the preface, the author refers to himself, throughout it, in the third person, and throughout the second paragraph, in the first, a habit the lamented Murray disapproved. But these are trifling blemishes compared with the many points of real excellence that abound in the book.

The German Pharmacopœia. Translated by C. L. LOCHMAN. With an Appendix Explanatory of the French Metrical System, and Tables of Weights and Measures. Philadelphia: David D. Elder & Co., 1873. 1 vol., cloth, 12mo. pp. 395. Price, \$2.25.

This is a translation of the Standard Pharmacopœia of the German Empire, compiled by the

leading pharmacists of the various States, in 1872. The translation is very carefully done, and the names of the substances are given in Latin, English and German. Hence it is of decided value both to pharmacists and physicians, called upon, as they often are, for medicines by their German or Latin names, and in reading works in or translated from those tongues. The arrangement is lucid, and, what deserves especial mention, four indices are given, of the English, the Latin, the German and the systematic names respectively.

Transactions of the Fourth Annual Session of the Medical Society of Virginia, 1873. Richmond, 1874. pp. 124.

Besides the Proceedings, this volume contains a number of scientific papers which will be read with interest. The address of the President, Dr. HARVEY BLACK, was upon the duties of the State regarding irregular practitioners and adulterated medicines, and is characterized by sound sense; Dr. ROBERT S. HAMILTON has an address on the reciprocal relations of the medical profession and communities; Dr. THOS. P. ATKINSON replies to the strictures of the Boston *Medical and Surgical Journal* on his theory of the difference between whites and blacks. Of more directly scientific interest are papers by Dr. HUNTER MCGUIRE, on wounds of the peritoneum; by Dr. WM. A. GILLESPIE, on intermittent and remittent fevers; by Dr. W. C. DABNEY, on nitrite of amyl as an antidote to chloroform; by Dr. A. M. FAUNTLEROY, on chloroform in obstetrical practice; by Dr. SAMUEL K. JACKSON, on the pathology of typhoid fevers, and others.

Half-Hour Recreations in Popular Science.

No. 10. Origin of Metalliferous Deposits.

By Prof. T. STERRY HUNT. The Phenomena of Sleep. By Dr. RICHARDSON. Boston: Estes & Lauriat. Price 25 cents.

Half-Hour Recreations in Natural History. In-

sects of the Garden. By A. S. PACKARD, Jr. Boston; Estes & Lauriat. Price 25 cents.

These numbers of the Half-Hour Series are fully equal to any that have preceded them. Dr. Richardson believes that sleep arises neither from an increased nor a diminished cerebral circulation, as the two current theories say, but from a temporary change in the cerebral substance from a less to a state of greater solidity—actually the same which occurs at death, only in a less extreme degree.

MEDICAL AND SURGICAL REPORTER.

PHILADELPHIA, APRIL 18, 1874.

D. G. BRINTON, M.D., Editor.

Medical Societies and Clinical Reports, Notes and Observations, Foreign and Domestic Correspondence, News, etc., etc., of general medical interest, are respectfully solicited.

Articles of special importance, such especially as require original experimental research, analysis, or observation, will be liberally paid for.

To insure publication, articles must be practical, brief as possible to do justice to the subject, and carefully prepared, so as to require little revision.

Subscribers are requested to forward to us copies of newspapers containing reports of Medical Society meetings, or other items of special medical interest.

We particularly value the practical experience of country practitioners, many of whom possess a fund of information that rightfully belongs to the profession.

The Proprietor and Editor disclaim all responsibility for statements made over the names of correspondents.

NOTICE TO SUBSCRIBERS.

The MEDICAL AND SURGICAL REPORTER, the HALF-YEARLY COMPENDIUM, the PHYSICIAN'S POCKET RECORD, and the other publications of this office, will continue to appear punctually and without interruption, as heretofore. Dr. D. G. BRINTON, who has had entire charge of both the business and editorial management of the office since more than a year previous to the death of Dr. S. W. BUTLER, will retain his relations to these publications, and increased efforts will be made to maintain their high character and general popularity.

Drafts, checks, etc., should henceforth be drawn to the order of D. G. BRINTON, as business manager.

Letters, whether on business or literary matters, should be addressed

THE MEDICAL AND SURGICAL REPORTER,
115 South Seventh Street,
Philadelphia.

THE RECENT ELECTION AT THE JEFFERSON.

The canvass which preceded the election to the chair of anatomy at the Jefferson Medical College (the result of which was announced in our last issue), was an unusually close one. There were five candidates, all gentlemen of high social and professional position, any one of whom would probably have ably filled the chair. The successful aspirant, whoever he might prove, well knew that he could regard himself but as *primus inter pares*. The College would doubtless have profited by the teachings of any one of them.

Nevertheless, we believe that in some respects the choice made by the Trustees will be peculiarly gratifying to the majority of the alumni and friends of the Institution. Dr. WILLIAM H. PANCOAST has for a number of years been identified with the course of instruction in the department in which he now succeeds his eminent father. His fitness, therefore, for the post has already been abundantly demonstrated. His personal qualities have always rendered him popular with the students, and his thorough scientific education has always commanded their respect. Furthermore—and this is no light matter—he cannot but have a filial pride in sustaining that distinguished reputation with which his father's brilliant operations and long services have surrounded the chair now vacated by him in favor of a younger generation.

While we feel no distrust but that the newly chosen Professor could alone and single handed acquit himself creditably of the duties of his post, it is nevertheless a matter of self-gratulation with us as an alumnus of the school, a sentiment which will doubtless be shared by other alumni, that this choice secures to the Institution the continued warm interest, and in a measure the personal "aid and comfort," of the recent illustrious occupant of the chair, to a more complete degree than we could otherwise have had a right to expect. Not that in any event of the election we could suppose that he would have neglected the welfare of the school;

but now that he sees "a son of his succeeding," an increased rather than an abated interest in the institution will be the natural consequence of his resignation.

We can honestly, therefore, congratulate, not only the successful aspirant himself, which we heartily do, but the College and its alumni as well, on the selection thus made by the Trustees.

THE PREVENTION OF EPIDEMICS.

The study of epidemics justly attracts the attention of the most earnest workers in State medicine. Though a material increase in the sum total of health in a given community is not likely to be attained in any very near epoch of human history, an actual prolongation of the average expectation of life, and an almost complete suspension of extensive epidemics, are goals we have a right to believe near us, as we have to a considerable degree already attained them. Life is longer than it was two centuries ago, and the last of the fearfully desolating pestilences, such as we read about in medical chronicles, was that which swept over Southern France in the days of the Regency, now a century and a half behind us.

The difficulties that stand in the way of united professional action in this matter arise largely from a misunderstanding about the meaning of the words *contagion* and *quarantine*. The former is well discussed by Dr. Austin Flint, in a recent number of the *New York Medical Journal*. This article is entitled "The Logical Proof of the Contagiousness and of the Non-Contagiousness of Diseases." He begins by distinguishing "logical proof" from demonstration; "the demonstrative proof of the contagiousness of a disease consists exclusively in its communication by inoculation." Such proof certainly exists, in the case of small-pox and several of the cutaneous diseases, for example; doubtfully in the case of measles and chicken-pox. There is abundant logical, but no demonstrative proof of the contagiousness of scarlet fever, typhus-fever, and whooping-cough; "the absence of demon-

strative proof, therefore, by no means warrants the conclusion that a disease is non-contagious." This conclusion may be reached, Dr. Flint thinks, by applying the criteria which he develops in seven propositions, with special reference to epidemic cholera, though yellow-fever is also made to furnish illustrations. Summing up in regard to the former disease, he finds that cholera is non-contagious because (1) it is not communicable by immediate contact, or by impalpable emanations from the body; (2) it is not followed by fresh cases when it appears in persons who have removed from situations where it prevailed to situations which had hitherto been free from it; (3) it characteristically breaks out simultaneously in places widely separated, under circumstances precluding the possibility of contagion; (4) its epidemics are self-limited as regards duration; (5) they exhibit a progressive increase and consequent progressive decrease in the severity of the disease; (6) their diffusion over a large area is often very rapid, and their disappearance rapid and speedily complete; (7) they depend upon favoring seasons (the warm ones) and on auxiliary causes or localized conditions. At the close he points out a necessary distinction: "Let it be borne in mind that, although not contagious, cholera is a portable disease. The special cause, whatever it be, is transported in ships, clothing, merchandise, etc., and, finding local circumstances favorable for its multiplication or increase, it gives rise to cholera epidemics. The special cause is destroyed by disinfectants, and the disease may in this way be 'stamped out.'" Yellow-fever may be suppressed in the same way.

The loose and vague manner in which medical men use the word *quarantine* is justly condemned by Dr. ANSTIE, in the *Practitioner* for March. He says he had, for example, heard one medical man tell a mother that her child, attacked with scarlet fever, would have to be placed in quarantine several weeks, meaning thereby that it would have to be confined to the house for that period; and another medical man

inform a friend, as to a family having several members affected with measles, that the house should be quarantined for some time, meaning thereby that it would be well not to hold personal communication with the family for a few weeks. The evil arising from this growing loose use of a defined term is illustrated in many discussions where such vague and inaccurate use of the word causes a loss of time and a general doubt of the usefulness of any measures.

Quarantine is a technical term having a precise, well-understood definition, and it is desirable that it should be limited to this its proper meaning. Quarantine, the noun, according to the last edition of Webster, signifies, "specifically, the term, originally of forty days, but now of undetermined length, during which a ship arriving in port, and suspected of being infected with a malignant, contagious disease, is obliged to forbear all intercourse with the shore; hence, restraint or inhibition of intercourse to which a ship is subjected, on the presumption that she may be infected." *Quarantine*, the verb, according to the same authority, signifies, "to prohibit from intercourse with the shore, to compel to remain at a distance, as a ship from shore when suspected of having contagious disease."

In this connection, and to exhibit the general sentiment of the profession on the subject, we quote the following resolutions of the International Medical Congress at Vienna, of last year. The Presidents were Dr. ABDULLAH BEY, of Constantinople; Dr. TOMASCHICH, of Trieste; Dr. WITLACIL, of Vienna; and Prof. CAMINHOA, of Rio de Janeiro.

"1. The practice of quarantine as now carried out ought not to be maintained, because on the one hand it does not constitute a real protection (*une protection suffisante*) against contagious maladies; and on the other hand, it is directly opposed to the interests of commerce and industry.

"2. Quarantine ought to be limited to the time requisite for the examination and disinfection of the ship, the crew, and the passengers; and if there be no disease on board, the latter

should be released immediately after disinfection. But if there be cholera, or sickness of a doubtful nature on board, it will be necessary to isolate and disinfect the ship also. The regulations in respect to yellow fever and plague should remain for the present as they are.

"3. Existing quarantine regulations should be modified in accordance with Resolution 2.

"4. A permanent Epidemiological Commission should be formed, for the purpose of studying fundamentally and systematically all maladies arising from infection."

In the cholera epidemic last summer, it was well shown that not the most rigid quarantine excluded the disease, but the source of failure was that a quarantine sufficiently rigid is practically impossible; and that a quarantine alone, without other and energetic sanitary measures, is and must be inefficacious.

THE LATEST ABOUT PROTOPLASM.

The contractile matter out of which the very lowest organisms of the animal world are built up was called by Dujardin, in 1835, *Sarcode*. He saw it in the form of a substance which exuded in globules or diaphanous disks around the bodies of living helminths or amœbæ placed under the microscope between two plates of glass. Max Shultze showed that this substance is identical with that out of which the cells of the highly organized mammalia are constructed, and christened it, therefore, *protoplasm*.

Omitting the many intervening investigations which have been devoted to studying the nature, origin and development of this primary form of animal life, investigations in which the names of Beale, Huxley, Barker, Brücke, Robin, and many others are concerned, we shall refer only to the latest doctrines about it, as given by Dr. Heitzmann, in the Vienna *Medicinische Presse*. He has shown that protoplasm is by no means a simple body, but is made of a complicated, net-like arrangement of fibrillæ, composed of the true "living matter," in the meshes of which a non-contractile fluid is suspended and as it were entangled. The particular form assumed by

the living matter depends upon the age of the protoplasm, and this he claims first to have studied with sufficient accuracy.

In very young *amœbæ* the network is very dense, there is no nucleus, and here and there are a few very minute empty meshes. In a few days they obtain a nucleus, their movements become more rapid, and their color darker. At first such little masses are homogeneous; later, by increase around the periphery, the mass enlarges, the network of living matter augments, and a cell is formed.

The younger the protoplasm, the less power of motion does it possess, but the more readily does it unite with other protoplasm. The smaller and paler the nuclei are, the greater is the locomotive power.

The bearings of these researches on the development of bone and cartilage, and on the function of the medulla, are explained by the author, but they need not here be repeated. Probably other microscopists repeating these experiments will find it difficult to follow the demonstrations exactly, as the most practiced eye may be deceived in such minute studies.

NOTES AND COMMENTS.

This Winter in Cairo.

This much vaunted health resort has been anything but agreeable this winter. A writer to the *London Times* says "the thermometer before sunrise has stood at 37, 36, 35, and even at 33°, Fahrenheit, of course. We have had a great deal of kaarnisin or sirocco, a very cold wind here in winter. It blew, I think, for twelve days in succession. There was a kind of hurricane more than once, and the sky was obliterated by the clouds of dust and light sand which were whirled along by the wind. Even when there is no gale, there is a great deal of wind in Cairo, and the drifts of dust are sometimes most distressing. A poor French General suffering from chest or throat disease was so disgusted that he took himself off to Madeira, after giving this place a trial. Only one of the bedrooms (in the hotel) has a fireplace, and, so far as I know, only one of the sitting rooms has this luxury."

The health resorts in the Riviera, and other northern coasts of the Mediterranean, are also said to have suffered unusually from high and cold winds, and snow has fallen even in Sicily.

The Areca or Betel Nut.

This nut is the best known as a dentifrice, and masticatory, very popular with the Orientals. In Bombay it is said to be used also with good effect as an anthelmintic.

The natives pick it off the tree, and grate it on an ordinary nutmeg grater. About a teaspoonful is administered, after the patient has fasted twelve to fourteen hours, either made up into a bolus with ghee (clarified butter) or floating on milk, the latter being the favorite method. It generally acts (without any other medicines being given) in about an hour after administration, and is efficacious for round as well as tape worms. It is used both for the human subject and dogs, in the same manner and dose.

Drunkenness and Insanity.

The last English census report says that it has been established by the observation of many authorities that intemperance is the most prolific cause of insanity, especially among the working classes. To the cases of madness resulting from habits of drunkenness on the part of the individuals themselves must be added the numerous instances in which persons owe their insanity to the intemperate habits of their parents. It is said that the fruitful source of mental disease, hereditary taint, insanity inherited from parents, is fostered by the insane being allowed to propagate their kind with scarce any effort to check so deplorable an event. Large numbers of the insane and the idiotic still remain at home, or are "boarded out," and become in many instances the agents of extending the fell malady through their offspring.

Extract of Malt.

Those physicians who would obtain the nutrient properties of beer and ale, without their alcoholic additions, should employ extract of malt. There is no formula for this in the *U. S. Pharmacopœia*, but we quote the following one from Mr. Lochman's recent translation of the German *Pharmacopœia*:—

Take of barley malt, bruised, and common water, each, one part. Mix, set aside for three hours, then add of common water four parts. Digest for an hour, at a temperature not exceed-

ing 65° C.; then heat the mass to the boiling point, and strain immediately by expression. Evaporate the clear liquid as rapidly as possible, stirring constantly, to the consistence of a thick extract. Extract of malt is yellowish-brown, having an agreeable sweet taste. It should be preserved in a cool place.

A ferrated extract is made by adding to 95 parts of the above two parts of pyrophosphate of iron, with citrate of ammonia previously dissolved in three parts of distilled water.

Staining Fluid.

Mr. Lawson Tait says, in the *Lancet*, in regard to a staining fluid for preparations, Boehmer's hæmatoxylin solution is given at page 93 of the fifth edition of Frey, as follows:—

- | | |
|----------------------------------|------------|
| R. 1. Hæmatoxylin (crystalline), | 1 grm |
| Absolute alcohol, | 30 c. cm |
| 2. Potash alum, | 5 to 1 grm |
| Water, | 30 c. cm. |

Drop the first solution into the second until a deep violet color is produced. This solution does not keep well; and, even when its results are good, they are very evanescent, scarcely any preparation keeping its color longer than a few weeks. It is also very difficult to manage; for the tissues are easily over-colored, and even when the surplus is reduced by alum the results are not satisfactory. But when a section has been well stained by it the results are finer than with any other fluid.

My modification of the hæmatoxylin stain is, that the first solution is dropped into a five per cent. solution of nitric acid until a deep crimson solution results. The effects of this are superior to those of carmine, and are permanent.

Treatment of Chloroform Asphyxiation.

The following so-called *new* method is not so new but that it was mentioned in this journal years ago. But it is a good one, and merits repetition. The quotation is from the *Lancet*.

"Dr. Campbell, of Paris, recommends, in a late number of the *Journal de Thérapeutique*, to place persons threatened with death from inhalations of chloroform head downwards and feet upwards for between ten and fifteen minutes. He considers that death arises through syncope due to cerebral anæmia; hence the advantage of inducing an artificial cerebral congestion. The usual efforts at mechanical breathing, excitement of respiratory nerves, the drawing out of the tongue, insufflation into the lungs, etc., may be

had recourse to concurrently. Dr. Campbell mentions only one case where this method succeeded; it was suggested by Nélaton during an operation performed at Paris by Marion Sims. It would appear that the late Professor Nélaton was the first surgeon who introduced this practice. The author also thinks that the inverted position tends to drive from the lungs and trachea pent-up vapors of chloroform, which were increasing the asphyxia."

Saccharate of Cod-Liver Oil.

An Italian physician, Dr. Tisiere, recommends the following as an elegant manner of exhibiting cod-liver oil:—

- | | |
|-------------------------------|----------|
| R.—Gelatin. alb. (in grains), | 3j; |
| Aque. destillatæ, | |
| Syr. simplicis, | aa 3vj; |
| Sach. pulv., | |
| Ol. Jecoris asell, | aa 3xij. |

Dissolve the gelatine in the water, in a sand bath, and add the syrup. Mix the sugar with the oil, to a smooth paste, and add it to the above while hot, stirring constantly till cold. Pour on a table, cut into pieces and dry in an oven. Flavors can be added as desired.

A Little-Studied Cause of Hoarseness.

The hoarseness to which many public speakers become subject is generally regarded as a symptom of some sort of laryngitis. Dr. H. Welsch, in the Bavarian *Intelligentzblatt*, points out, however, another cause which deserves to be borne in mind in treating these generally obstinate cases, and that is, that the defect of the voice occasionally arises from *partial paralysis of the crico-thyroidæ* muscles. They are thus disabled from drawing down the thyroid cartilage, and the extension of the vocal cords requisite to distinct phonation is impossible. The glottis assumes a sort of funnel shape. The treatment he recommends is tincture of iodine externally, and faradization of the impaired muscles.

The Range of Intermittent Fever.

The general rule is laid down by medical geographers, that intermittent does not prevail north of 46° north latitude. (See, for example, Dr. A. Mühy, *Klimatographische Uebersicht der Erde*, p. 227.) At the last meeting of the German Association of Naturalists and Physicians, Professor Hjelt, of Helsingfors, pointed out a remarkable exception to this

in Finland, where well marked malarial fever is seen as far north as $64^{\circ} 40'$ north latitude. It has progressed steadily northward for thirty years past. What is not less singular, Finland will be wholly free from intermittent for seven or eight years, and then it will spread like an epidemic over the whole country, having a more marked intermittent type in the winter and early spring, changing almost to a remittent in the late summer.

The Last Camp-Follower of the Revolution.

Dr. S. R. Huniston, of Smithville, Monroe county, Indiana, sends us some particulars of William Ross, now one hundred and fourteen years old. He was born in Maryland, and served in the Revolutionary war as a waiter boy, and in the war of 1812 as a private soldier. At its close he moved to Indiana. He has ridden to town on horseback, a distance of three miles, several times this winter. He secured his second eyesight about twenty-five years ago. For a number of years he was bald, but a year ago his whole scalp became covered with a new crop of fine gray hair. He has chewed tobacco from boyhood, and is still physically quite active.

Effects of Extirpation of the Mammary Glands.

In the first number of Professor Pajot's *Annales de Gynecologie* is an account of some curious experiments by M. de Sinety. The Indian pig has but two mammae; when these are extirpated no serious results follow to the life of the animal. If the operation is performed during lactation, sugar does not appear in the urine, but fatty globules become visible. More curious, the whole number, ten in all, on whom he experimented, remained sterile after the operation. Whether the sterility was permanent, could not yet be decided.

CORRESPONDENCE.

Nux Vomica in Obstetrics.

ED. MED. AND SURG. REPORTER:—

Careful observation, made during a practice of thirty years, has demonstrated to me one fact which I deem of sufficient importance to be worthy of communicating to others through your valuable journal, viz., that nux vomica is an extremely useful medicine in labor. I advise my fellow practitioners to test it, guided as they may be by their knowledge of the therapeutical qualities of the drug, giving, in ordinary cases, two or three doses of about three grains each,

one every half hour. Soon they will be convinced that it alleviates suffering, and, in cases where the pains are irregular, they will give at once six or eight grains. I predict that they will thereafter cease to use often either morphine, chloroform, chloral, ergot, or quinine, as the nux vomica, at the same time, meets the various indications for which they are given. During the last four months I have given it in thirty cases, and all did well without the use of forceps, and I am so satisfied that the medicine renders the pains efficient, and at the same time bearable, that I think I may almost always get along without instruments. I prefer the powdered nux, but it is possible that other forms of the medicine which are more easily taken may be as well.

S. P. SACKETT, M. D.

Ithaca, N. Y., March 4, 1874.

NEWS AND MISCELLANY.

The Surgeon General on the Medical Department of the Centennial.

The following letter from the Surgeon General to the Chairman of the Committee on Classification, of the Centennial Exhibition of 1876, will be perused with interest. Along with all other liberal and enlightened scientific men, Surgeon General Barnes is deeply interested in the success of this national undertaking:—

WAR DEPARTMENT,
SURGEON GENERAL'S OFFICE,
WASHINGTON, D. C., June 25, 1873.

SIR:—I have carefully examined the pamphlet containing the system of classification adopted by the United States Centennial Commission, which accompanied your letter of April 30, 1873. It appears to me highly desirable that all the objects relating to the science of medicine (including surgery and hygiene) should be embraced in a single group and exhibited together, rather than scattered throughout many groups. I am sure that no other arrangement will be generally satisfactory to medical men throughout the world.

The group would naturally be "Group 101" in the plan of the Commission, and should be entitled "Medicine," (not sanitary).

I inclose an outline classification of this group, which appears to embrace the whole subject, and should this outline prove acceptable to the Commission, I will take pleasure in supplying details. (Please return this proposed outline grouping with your reply).

Very respectfully, your obedient servant,
C. H. CRANE,
Assistant Surgeon General, for the Surgeon General.

MEDICINES.

First.—Medicines.

1. Official. (In any authoritative pharmacopoeia). a. Articles of the *materia medica*. b. Preparations.

2. Unofficial. a. New remedies. b. Patent medicines. c. Miscellaneous.

Second. Dietetic preparations (as beef-extracts and other articles intended especially for the sick).

Third. Pharmaceutical apparatus. (Including apparatus for use on the large scale as well as that intended especially for apothecaries).

Fourth. Instruments for physical diagnosis (such as clinical thermometers, stethoscopes, ophthalmoscopes, etc., except clinical microscopes, which should be exhibited with other microscopes in the section for optical apparatus).

Fifth. Surgical instruments and appliances (including, besides instruments, dressing apparatus for deformities, prothetic apparatus).

Sixth. Obstetrical instruments and appliances.

Seventh. Dental instruments and appliances.

Eighth. Vehicles and appliances for the transportation of the sick and wounded. (Both during peace and war, on shore and at sea).

Ninth. Hospitals and their equipments. (Including temporary and permanent military hospitals; civil hospitals for general purposes and for special purposes, such as for the treatment of the insane, for lying-in-women, for the eye, for venereal, for contagious diseases, etc., dispensaries, and asylums).

Tenth. Hygiene, public and private. (Including everything that relates to quarantine and the sanitary laws and regulations of communities).

Eleventh. Means of medical and surgical instructions.

1. General and special medical schools (including plans of buildings, etc.)
2. Medical and surgical museums.
3. Medical libraries, books, and journals.

An appropriation has been made by the Philadelphia County Medical Society to help the cause.

The Louisiana State Lunatic Asylum.

The Board of Trustees of the State Lunatic Asylum, located at Jackson, Louisiana, at their meeting in New Orleans, on the 1st inst., elected Dr. J. Welch Jones as Superintendent of that Institution for the ensuing two years.

No better selection could have been made. Dr. Jones stands high in his profession, and is a gentleman every way qualified to discharge its duties with credit, and to extend the most enlightened treatment to the unfortunates entrusted to his care.

The Franklin Reformatory Home for Inebriates, Philadelphia.

The Superintendent's report states that the admissions to the Home during the year were 112, of whom 44 were readmitted. The present status of the inmates is as follows: Permanently reformed, 60; benefited, 14; unknown, 1; permanent reformation doubtful, 33. Four have died.

Correction.

Cur. vol., p. 301, col. 1, line 5, substitute for "forming a puncture" the word "juncture."

Wills Ophthalmic Hospital.

The annual report of this institution, located in this city, for 1873, shows that the total number of patients, or of those accommodated in the hospital, and of those resorting to the clinics from day to day, was 3504; nearly 1000 more than in 1872. Of the whole number of patients, 318 were admitted to the hospital. The number of operations performed was 587, of which 311 were for affections of the lids of the eye.

Retorts Professional.

Two eminent physicians of London, Drs. Mead and Woodward, fought a duel; Mead disarmed Woodward, and bade him beg for his life. "Never till I am your patient!" said Woodward.

This is equaled by the reply of Trousseau, to a celebrated homeopathist of Paris. The latter said, "M. Trousseau, all your patients are running to me." "And all yours," replied the great Professor, "are being carried to me."

The Sewing Machine Question.

A committee of the New York Legislature has favorably reported, prohibiting the use of any crank treadle on any machine intended to be operated by the foot or feet of working women, and punishing by fine any manufacturer or employer who makes such treadles or causes them to be used. But the *patent* treadle does not come under the prohibitory provision of the law, and will, therefore, be, in the event of the enactment thereof, the only treadle which can be lawfully used.

This smells of jobbery.

Medical Humor.

When Professor Traube celebrated his five-and-twentieth anniversary as head physician at the Charity Hospital, Berlin, last February, the internes and students held a "commerz," or, as we might say, a "bust," at which numberless seitels of beer and schoppens of wine were emptied, while the comic muse was invoked to enliven the scene. For the benefit of our German readers we quote a pair of verses from one of the songs:—

Wenn nach vielen tausend Jahren
Stets auf Gummirädern fahren
Selbst die ärmsten medici—
Wenn des eignen Herzens Schwirren
Mit dem Herzhohr ohne irren
Hört ein künftiges Genie—
:: Dann ade, ade, ade :: dann ade Schatz, lebewohl!

Wenn trotz Leberthran, Lippspringe
Die Lungenspitze guter Dinge
Tuberkelkase producirt—
Wenn hier grosse Blasen springen,
Die noch gar metallisch klingen,
Wenn das Fieber hektisch wird,—
:: Dann ade, ade, ade :: dann ade Freund, lebewohl!

—The surgeons who served in the Confederate army will hold a convention at Atlanta, Ga., on the 20th of May, to arrange for the publication of important medical and surgical facts developed during their war experience.

Personal.

—Dr. G. T. Morton, who for fifteen years has been visiting physician at the Wills Hospital, this city, presented his resignation, April 7th, asking to be relieved from further attendance through an increase in private practice. His resignation was accepted, and the gentleman appointed emeritus surgeon. By a previous resolution of the board, the vacancy will not be filled, as there are still nine surgeons in attendance.

—The Board of Trustees of the Philadelphia College of Pharmacy, at a late meeting, unanimously elected Joseph P. Remington professor of theory and practice of pharmacy, to fill the vacancy caused by the death of the late Professor William Proctor, Jr. Mr. Remington is a graduate of the college, and has for the last three years filled the position of assistant professor to the chair. He is a Philadelphian by birth.

—M. Ricord has just returned from Constantinople, whither he went on a professional visit to the Sultan. His advice must have been successful, as he has been presented by the Sultan with the order of Commander of the Medjidie; but we did suppose the Sultan, at least, would not need the services of a gentleman of M. Ricord's specialty!

—Sister Mary Ursula, one of the oldest Sisters of Charity in the United States, died at Mount Hope Retreat, near Baltimore, April 6th, aged seventy-one years. Deceased, whose family name was Elizabeth Mattingly, was active as a Sister of Charity for nearly fifty years, and labored in the hospitals of Brooklyn, New York, Buffalo, and Richmond, Va.

—On March 18th, the death of Dr. Joulin took place, at his residence in Paris, from congestion of the brain. He was one of the leading accoucheurs of Paris, an *Agrégé* of the Faculty of Medicine, and founder of an obstetrical journal that bore his name.

—Susan Morton Quincy and Lucretia Goddard, aged respectively twelve and ten years, daughters of Dr. B. A. Gould, of Boston, were drowned, with their female attendants, while bathing, near Cordova, in the Argentine Republic, in February.

—Francis Viele, an old physician of Elizabeth, N. J., died at his residence in that city, on Thursday morning.

—Dr. H. M. Wick, of New Bethlehem, Clarion county, Pa., died on the 15th ult., in the 60th year of his age.

—Great anxiety appears to exist in the Argentine Confederation with regard to the possible outbreak of cholera there.

—In 1870 there were in the United States 1996 professional undertakers, of whom twenty were women.

—Forty cases of small-pox are reported in the small village of South Windham, Conn.

QUERIES AND REPLIES.

Dr. A. K., of Iowa.—We can furnish you a complete set of the *REPORTER*, if desired.

Dr. W. H. V., of Wis.—Fordyce Barker's work costs \$5.00.

Dr. W. T., of Mo.—The name "wild tea" is applied to several species of plants. We will try to ascertain the variety you refer to as used in cancer.

OBITUARY.

DR. HENRY MILLER.

At a stated meeting of the College of Physicians of Philadelphia, held April 1, 1874, Prof. Gross announced the death of Prof. Henry Miller, of Louisville, Ky., and offered the following preamble and resolutions, which were adopted:—

"Whereas, The College of Physicians of Philadelphia has heard with profound regret of the death of Prof. Henry Miller, M. D., of Louisville, Kentucky, an Associate of this College; and whereas it is meet and proper, when a great and good man dies, that his surviving friends should record their opinion and feelings of his worth; therefore, be it

Resolved, That in the death of Dr. Henry Miller, for nearly a third of a century Professor of Midwifery, first in the University of Louisville, and afterwards in the Louisville Medical College, medical science has lost one of its most zealous votaries, obstetric medicine one of its most instructive and lucid expounders, and American authorship one of its most able and distinguished writers.

Resolved, That a minute of these proceedings be recorded upon the books of this College, as a mark of our appreciation of the worth of our deceased associate; that a notice of them be published in the medical journals of this city, and also that the Secretary be instructed to send a copy of them to the family of the late Professor Miller, with the assurance of our heartfelt sympathy in their bereavement."

JOHN H. PACKARD, Secretary.

MARRIAGES.

GOODMAN-GEARY.—On the 9th instant, at the residence of James W. Bosler, Carlisle, Pa., by T. H. Robinson, D. D., Henry Earnest Goodman, M. D., of Philadelphia, and Mary C. Geary, of Harrisburg. No cards.

HUNTER-HAYES.—On the 9th instant, by the Rev. Dr. Blackwood, Thomas Hunter, M. D., and Margaret H., daughter of William Hayes, all of this city.

MACDONALD-HARDY.—On Tuesday, March 24, by Rev. A. H. Partridge, Carlos M. MacDonald, M. D., of Flatbush, and Alice M. Hardy, of Brooklyn, N. Y.

MARSLAND-CHURCH.—On Monday, 30th March, by Rev. Dr. Colton, at St. Stephen's Church, Wilkesbarre, Pa., George Marsland, M. D., of this city, and Lucinda, only daughter of the late Addison C. Church, Esq., Magistrate of the County of Luzerne, Penn'a.

MATLACK-JAMES.—On the 25th ult., by the Hon. William S. Stokley, Mayor of the city, Richard B. Matlack, M. D., and Miss R. Anna James, both of Chester county, Pa.

DEATHS.

BLACK.—In Pittsburgh, on Friday, noon, March 20th, 1874, Margaret Watson, wife of Alex. Black, M. D., in the 54th year of her age.

HUBBS.—In Brooklyn, on Tuesday, March 31, of heart disease, Dr. William N. Hubbs, aged 47 years, 2 months, and 14 days.

KEACH.—In Passumpsic, Vt., March 5th, Dr. John Keach, aged 87 years.

WHITE.—In this city, April 2, 1874, Isabella, wife of Dr. Edward White, and daughter of Rudolph Garigue, in the 21st year of her age.

METCALF.—At Huimanguillo, Mexico, Jan. 11, 1874, Dr. Edward Augustus Metcalf, formerly of Kinderhook, N. Y., in the 49th year of his age.